THE STRATEGY FOR NON-ATTAINMENT AREAS ITS IMPACT ON MODELING AND FEDERAL LAND MANAGERS

Bruce M. Kramer

B. Kramer
Final Report for 16-897-GR

The Strategy for Non-Attainment Areas

Its Impact on Modeling and Federal Land Managers

Submitted by:

Bruce M. Kramer
Professor of Law
Texas Tech University
School of Law
U.S.D.A. Grant # 16-897-GR
Eisenhower Consortium

When Congress in 1970 adopted the Clean Air Act Amendments it created a basic deadline of 1975 for the attainment of the health-protecting national primary ambient air quality standards (NPAAQS).[1] It did so without any knowledge or certainty that the deadlines be met. The setting of this rather short deadline was a part of the technology-forcing strategy designed to create incentives for industry to develop emission limitation systems not then in existence.[2] As 1975 rolled around it was readily apparent that the technological breakthroughs required to attain the NPAAQS had not materialized. Some 132 of the 247 Air Quality Control Regions were in violation of the NPAAQS for particulate matter.[3] At least 35 other AQCR's were in violation of the sulfur dioxide NPAAQS and there was widespread failure to meet the photochemical oxidant standard in most major metropolitan areas. Given the "all-or-nothing" approach of the 1970 Clean Air Amendments the country was faced with shutdowns of major emitters in dirty-air areas in order to meet the absolute requirements of Section 110 of the Act.[4] After extensive congressional review and near passage of an amendment in 1976 Congress revamped the statutory scheme to deal with the reality of nonattainment with the passage of the 1977 Clean Air Act Amendments.[5]

Since the 1977 Amendments were two years past the deadline for attainment of NPAAQS the Environmental Protection Agency had in the interim developed a policy, entitled Emission Offsets, which was designed to allow continued industrial development in areas which had

not attained the NPAAQS.[6] This Interpretive Ruling allowed new economic development in nonattainment areas by placing several stringent conditions on the issuance of a permit for any major source of pollution. The source would have to utilize the Lowest Achievable Emission Rate (LAER) which was defined to be the lowest emission rate actually achieved in practice. In no event could the emission rate exceed the limits set under the New Source Performance Standards.[7] Secondly, the owner or operator of the source had to certify that all plants controlled by the individual or corporation were in compliance with other SIP requirements. Thirdly, and most important, the owner or operator had to secure emission reductions or offsets from existing sources so that the net emissions after the source came on line were less than the emissions prior to the source's polluting activities.[8] In simple terms the permittee had to show that if the source were to emit 100,000 tons of sulfur dioxide per year he would have secured a net emission reduction from existing sources of at least 100,001 tons of sulfur dioxide. The offsets had to show a net benefit in air quality not merely the maintenance of the status quo. Under the terms of the Interpretive Ruling if the SIP had to be revised in order to attain NPAAQS no new construction activities would be allowed until such time as the EPA approved the SIP revision.[9] The 1977 Amendments endorsed the continuing operation of the Interpretive Ruling until June 30, 1979 when the new statutory provisions for nonattainment areas would supersede the EPA policy.[10]

In developing a non-attainment area strategy the first thing that Congress had to deal with was the confusion as to what areas were clean and what areas were nonattainment. Congress thus mandated that within 120 days of the passage of the 1977 Amendments each State had to submit a list identifying those AQCR's or portions thereof, under five different categories.[11] These five categories were: (1) nonattainment of NPAAQS for pollutants other than sulfur dioxide or particulate matter, (2) non-attainment of NPAAQS for sulfur dioxide or particulate matter, (3) non-attainment of National Secondary Ambient Air Quality Standard (NSAAQS) for any pollutant, (4) nonclassifiable under categories (2) or (3) for sulfur dioxide and particulate matter for lack of information, and (5) attainment areas or areas not classifiable for the other pollutants.[12] Within 60 days of the submission of these area designations the Administrator of the EPA was to promulgate the list with such modifications as he deemed necessary.[13]

The Administrator in implementing the provisions of Section 107 refused to engage in informal rulemaking procedures including providing a notice in the Federal Register and allowing comments to be sent in prior to his decision to promulgate the list of attainment and nonattainment orders. He did so ostensibly because of the rather short period, 60 days, in which he was ordered to act after submission of the recommendations by the State. In several different instances the Administrator's failure to follow the informal rulemaking requirements of the Administrative Procedure Act was attacked by polluters who disputed certain areas being designated as non-attainment.

In U.S. Steel Corp. v. EPA,[14] petitioners were attacking the designation of certain parts of Alabama as nonattainment areas. The petitioners' main argument was the failure of the Administrator to comply with the informal rulemaking procedures of the Administrative Procedure Act.[15] The EPA had conceded that the designation of the areas was a "rule" under the APA but insisted that one of the exceptions to the requirements to hold a notice and comment rulemaking proceedings was met which would excuse the EPA from instituting that type of procedure. The APA provides that if the administrative agency can for good cause show that the hearing procedures would be "impracticable, unnecessary or contrary to the public interest" no hearing need be held.[16]

The EPA felt that the statute mandated a decision by the Administrator within 60 days of submission and it would be impossible for the agency to hold notice and comment hearings on all 50 states' submissions within that narrow timeframe. The court, choosing to narrowly define the exceptions stated in the APA, concluded that the EPA had an alternative procedure available to it, which would have allowed the notice and comment rulemaking procedure to be accommodated within the narrow timeframe created by Congress. In this particular case the court also refused to allow the EPA's subsequent acceptance of comments on the designations to cure the defect in the lack of the notice and comment procedure. It thus concluded that the designation must be removed until such times as the proper procedures are followed.[17]

In addition to the Fifth Circuit's decision in U.S. Steel, two other circuits have concluded that the EPA was required to hold a notice and comment rulemaking proceeding prior to the area designation. In State of New Jersey v. U.S. Environmental Protection Agency,[18] the District of Columbia Court of Appeals agreed with the rationale of the Fifth Circuit in finding that the legislative history of the APA evinced a narrow application of the APA "good cause" exception for rulemaking hearings.[19] The Third Circuit has taken a similar view.[20]

In contrast both the Sixth[21] and Seventh[22] Circuits when faced with a similar challenge accepted the EPA's proffered defense that it was impracticable (given the 60-day deadline) to hold notice and comment rulemaking proceedings for promulgating the list of nonattainment and attainment areas. The court was impressed by the congressional sense of urgency that the task of cleaning up the nonattainment areas to reach the health-protecting levels of the NPAAQS was of utmost importance. In so doing the court found that the exceptions to the APA requirement of notice and comment rulemaking procedures would have little application if not in the situation as presented in this case.[23]

In resolving the procedural issue in favor of the EPA the Sixth Circuit in Republic Steel then had to tackle the substantive attack on the validity of the designations because they were allegedly based on erroneous and incomplete modeling results.[24] The petitioners claimed that by using emissions data based on 24 hours per day operations at full capacity the EPA was acting arbitrarily. The court viewed this attack as merely a

restatement of the attack made in Cleveland Electric Illuminating[25] and Cincinnati Gas and Electric[26] both of which were rebuffed by the Sixth Circuit. The court found that the Clean Air Act clearly authorized the EPA to use either modeling or monitoring data. The choice is the EPA's not the courts unless the plaintiff can show that the EPA was clearly arbitrary or capricious.[27] The petitioners further argued that the EPA ignored actual monitoring data showing attainment of NPAAQS in setting up the boundaries of its nonattainment areas. The EPA relied almost totally on the modeling predictions. Again the court gave deference to the EPA discretionary authority to use both modeling and monitoring data in order to see that the goals of the Clean Air Act are attained. Thus it found no error in using modeling data to the exclusion of monitoring data in the designation of attainment and non-attainment areas.[28]

The Seventh Circuit in a series of three cases dealing with three different nonattainment area designations upheld the EPA's use of modeling data to delimit the extent of the nonattainment areas.[29] Relying heavily on the Sixth Circuit cases of Cleveland Electric Illuminating and Cincinatti Gas & Electric the court was very hesitant to overturn EPA's modeling decision.

In several recent Sixth Court decisions the court further elucidated its position on the use of modeling in the nonattainment area designation context.[30] In General Motors Corp. v. EPA the petitioners sought to review the EPA's designation of certain Ohio courts as nonattainment for

total suspended particulates.[31] Petitioners alleged that EPA had failed to consider petitioners monitoring data showing attainment. EPA had rejected the data because it lacked "quality assurance." The court in reviewing the EPA decision found that the decision to reject the General Motors' monitoring data was not arbitrary or capricious. In addition, in designating another area EPA used a computer mapping program called SYMAP in lieu of General Motors' monitoring data. SYMAP user monitored data to produce isopleths to delimit areas of particulate concentrations.[32] Again the court refused to overturn the EPA's use of SYMAP even though General Motors had raised several major problems with it.[33]

In a second case, Cincinnati Gas and Electric Co. v. Costle,[34] the petitioners were attacking the designation of an area in Ohio as nonattainment for sulfur dioxide and total suspended particulates. Again petitioners had monitoring data from around this power plant showing no violation of NPAAQS. The monitors were planned in areas which computer diffusion modeling showed to be "hotspots."[35] The sulfur dioxide nonattainment designation was based on the use of MAXT-24, a model whose use had already been upheld by the Sixth Circuit.[36] Cincinnati Gas posed three major arguments: (1) EPA acted arbitrarily and capriciously in ignoring monitoring data; (2) EPA based its designation on hypothetical future circumstances; and (3) even though modeling may be appropriate, its use in this case should be designated unclassifiable rather than nonattainment (for sulfur dioxide).[37]

The court reviewed EPA's decision using the arbitrary, capricious and abuse of discretion test. It also viewed petitioner's argument as a "thinly disguised, belated motion for rehearing" of the original decision upholding the use of MAXT-24.[38] The EPA's policy to prefer monitored data to modeling predictions was based on the availability of accurate and complete data. The court did not find that petitioner's proffered data was adequate so as to displace the already approved use of MAXT-24.[39] The petitioner would have to prove that its data was adequate beyond the bare allegation that the monitoring was done by a meteorological consulting firm.

The court also dismissed petitioner's argument that EPA had failed to accept Ohio's recommendation contrary to EPA's policy. The court found no arbitrary policy in rejecting Ohio's recommendation even if there was a general policy of accepting state recommendations.[40] The court held that EPA's use of future growth predictions was in its control strategy not its attainment area designation. Since EPA was under a statutory mandate to maintain NAAQS it was quite appropriate for the EPA to factor in growth to develop an appropriate growth control strategy.[41] It also rejected petitioner's interpretation of the modeling data. Thus the court concluded that the EPA's area designations were reasonable under the circumstances.

Just as a pattern was emerging in the Sixth Circuit, the Court reversed an EPA designation based on similar facts. In PPG Industries, Inc. v. Costle[42] the petitioners were attacking the designation of part

of Summit County, Ohio as nonattainment for sulfur dioxide. While utilizing the same scope of review as they had in the three previous cases and especially relying on the Republic Steel case[43] the Sixth Circuit was troubled with EPA's reliance on the model used in this particular situation.

The court again upheld the ability of the EPA to use computer models even with "worst-case" assumptions.[44] In this case, however, EPA had admitted that its initial designation decision was based on modeling which had incorporated erroneous data regarding the location and emissions from certain important stationary sources within the county. The EPA had attempted to reanalyze the Summit County data but the record unfortunately did not reflect that reanalysis.[45] The court essentially required the EPA to go through a notice and comment rulemaking procedure before it actually designated the particular area. The APA is applicable in this case because the EPA was no longer concerned with the very short time deadlines imposed on the initial designation process by the Clean Air Act. This was not the case in the original designation decision. The Court also outlined the type of response EPA would have to make to the petitioner's comments concluding that the EPA must make a "reasoned response" to all worthy comments.[46]

The monitoring/modeling argument was also raised by the petitioners. The court reiterated its earlier holding that the EPA could base its decision on either modeling predictions or monitored data as long as the

modeling itself was supportable as an accurate predictor of air quality. EPA is free to choose modeling over monitoring as a policy matter. Once EPA makes that choice monitoring data is relevant only if the party proffering the data can prove the reliability and its data tends to show that the agency's modeling predictions were unsupportable.[48] Only at that point could the monitored data be used to show that the agency's continued use of modeling predictions was arbitrary or capricious.

The Sixth Circuit in its PPG Industries case has decided to clarify its application of the basic Overton Park arbitrary, capricious, and abuse of discretion test when it comes to the use of modeling in area designations. The EPA is still free to opt for the use of any modeling device that is scientifically acceptable in its area designation decision. Monitored data is only relevant and admissible in court if the party offering the data can show it is accurate and thorough and that the results tend to prove that the modeling actually used was inaccurate. Piecemeal data, incomplete results, short-term extrapolations will not be sufficient under this analysis. Only in the event that the petitioners can show a rather complete, accurate and relatively long-term data collection system will the court question the use of scientifically acceptable models by the EPA.

Thus modeling has again undergone judicial scrutiny coming out with a relatively clean slate. The courts have given the EPA broad parameters to first use modeling rather than monitored data in their decision-making process and then use that data to designate an airshed as either an attainment or nonattainment area.

Once an area is designated as nonattainment the 1977 Amendments created an entirely new statutory scheme for attaining the health-protecting national primary standards.[49] The attainment date was pushed back to December 31, 1982 or as expeditiously as practicable.[50] Learning from the experience of the 1970 Amendments Congress required the states which had nonattainment areas to submit by July 1, 1979 revised state implementation plans which would show "reasonable further progress" towards attainment.[51] If the state is late in submitting the revised SIP or the SIP is inadequate a penalty will be imposed by the EPA. This penalty includes the prohibition of state licensing of new or modified major stationary sources in nonattainment areas after July 1, 1979.[52] Where the automotive-related pollutants are the cause of the nonattainment designation a state may request an extension of the deadline to December 31, 1987.[53] The Administrator cannot grant the SIP extension unless the state establishes a program which fully analyzes major emitting facility site locations, institutes a vehicle emission control inspection and maintenance program, and identifies other measures which will insure attainment by the 1987 deadline.[54] The penalty for failing to submit a proper SIP for attaining the automotive-related standards includes the shutting off of federal highway aid for the state.[55]

Unlike the PSD program in which the federal land managers were given some role in the decision-making process the non-attainment area program set up by Congress delegated full responsibility to the states to attain the primary standard by the 1982 or 1987 deadlines. Thus, the federal

land manager has no statutory role to fulfil in dealing with non-attainment area permits. The states not the sources are the principal decision-makers under the nonattainment strategy. They cannot issue permits unless they can show that the new total emissions for an air-shed will decrease after the new facility starts emitting, exhibiting reasonable further progress towards attaining the total emissions needed to attain the national standards.[56] The state has to engage in a comprehensive inventory of actual emissions from all sources in a non-attainment area so that it may determine the needed reductions in emissions. To some extent modeling is required to show the required reduction from actual emissions to allowable emissions which will bring the ambient air quality below the national standards. But nowhere in the nonattainment area provisions is the use of modeling required.

Again, to contrast with the PSD program the decision to allow a major facility to be constructed or modified is basically up to each state so long as the statutory provisions are met. There is a requirement that the permit process be open to the public but no specific provision is made for input from federal land managers even though their lands may be adversely affected by the new emitting facility.[57] In this case the permit applicant has to develop the emission offsets necessary to show the net reduction in emissions and need not engage in any specific modeling or monitoring as is required under the PSD program. The permit applicant must also apply lowest achievable emission rate technology to control his emissions.[58]

A problem arose shortly after the 1977 Amendments were enacted regarding the new emitting facility which was locating in a non-attainment area but whose emissions would affect an attainment area. Did the PSD requirements apply? Would the increments and the visibility protection provisions add additional burdens to the permit applicant in addition to the nonattainment requirements? The EPA initially answered this question in the affirmative requiring new or modified major emitters which were going to impact on a PSD area to be subject to both the nonattainment area and PSD regulations.[59] This regulation was challenged along with the general PSD regulatory scheme in the landmark case of Alabama Power Co. v. Costle.[60]

After a careful scrutiny of the legislative history the court found that the PSD provisions were to apply to those major emitting facilities which were physically located in attainment areas.[61] The court thus concluded that major emitting facilities locating in non-attainment areas were only subject to the SIP provisions for that area, as well as the general provision regarding net reductions in total emissions and the application of the lowest achievable emission rate.[62] Therefore even though a facility may cause a violation of the increments in a Class I PSD area, if it is located in a nonattainment area the federal land manager has not statutory means to object to the issuance of the permit. He can, however, attempt to participate in the general permit application process as a member of the general public but has no special role as he would have in the PSD permitting process.

Thus, the 1977 Amendments returned to the states the principal role in devising control strategies needed to attain the national standards. Attainment dates were pushed back from 1975 to 1982 or 1987 but the basic technology-forcing, short-term strategy of the 1970 Amendments was retained. Federal land managers, some of whose lands are in nonattainment areas, were left out of the decision-making process. The basic strategy of emissions offsets and the "bubble" concept were construed to allow for continued industrial growth in nonattainment regions.

1. See generally Kramer, The 1970 Clean Air Amendments: Federalism in Action or Inaction, 6 Tex. Tech L. Rev. 47 (1974); Kramer, Economics, Technology, and the Clean Air Amendments of 1970: The First Six Years, 6 Ecol. L.Q. 161 (1976).

2. See generally Kramer, The 1977 Clean Air Act Amendments: A Tactical Retreat from the Technology Forcing Strategy, 15 Urb. L. Ann. 105 (1978); La Pierre, Technology-Forcing and Federal Environmental Protection Statutes, 62 Iowa L. Rev. 771 (1977); Currie, Relaxation of Implementation Plans Under the 1977 Clean Air Act Amendments, 78 Mich. L. Rev. 155 (1979).

3. EPA, State Air Pollution Implementation Plan, 1-2 (1975).

4. Union Electric v. EPA, 427 U.S. 246, 271-72 (1976) (Powell, J., concurring) said in part:

> Environmental consequences, long neglected, merit high priority, and Congress properly has made protection of the public its paramount consideration. . . . But the shutdown of an urban area's electric service could have an even more serious impact on the health of the public than that created by a decline in ambient air quality. The result apparently required by this legislation in its present form could sacrifice the well-being of a large metropolitan area through the imposition of inflexible demands that may be technologically impossible to meet and indeed may no longer even be necessary to the attainment of the goal of clean air.
>
> I believe that Congress, if fully aware of this draconian possibility would strike a different balance.

5. The Congressional Research Service has compiled much of the legislative history into an eight-volume work entitled A Legislative History of the Clean Air Act Amendments of 1977, Senate Comm. on Environmental and Public Works (95th Cong., 2d Sess. 1978). This is not a complete history as both houses of Congress held hearings in 1974 and 1975 which are not included in this eight-volume set. See, e.g., Hearings on the Implementation of the Clean Air Act Before the Subcomm. on Environmental Pollution of the Senate Comm. on Public Works, 94th Cong., 1st Sess. pts. 1-3 (1975); Hearings Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 93rd Cong., 1st Sess. (1973).

6. 41 Fed. Reg. 55,524 (1976).

7. Id. at 55,526.

8. Id. at 55,528-29.

9. Id. at 55,529.

10. Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 129(a), 91 Stat. 745 (1977).

11. 42 U.S.C. § 7407(d)(1) (1978).

12. Id.

13. 42 U.S.C. § 7407(d)(2) (1978).

14. 595 F.2d 84, modified on rehearing, 598 F.2d 915, 13 ERC 1149, cert. denied, 444 U.S. 1035, 100 S. Ct. 710 (1980).

15. 5 U.S.C. § 533 (1979).

16. 5 U.S.C. § 553(b)(B) cited at 13 E.R.C. 1152.

17. 13 E.R.C. at 1153-54. See also City of Waco v. EPA, 620 F.2d 84 (5th Cir. 1981).

18. 626 F.2d 1038 (D.C. Cir. 1980).

19. Id. at 1045-46.

20. Sharon Steel Corp. v. EPA, 597 F.2d 207 (1980).

21. Republic Steel Corp. v. Costle, 621 F.2d 797, 14 E.R.C. 1356 (6th Cir. 1980).

22. U.S. Steel Corp. v. EPA, 605 F.2d 283, 13 E.R.C. 1449 (7th Cir. 1979), cert. denied, 444 U.S. 1035, 100 S. Ct. 710 (1980).

23. Republic Steel Corp. v. Costle, 621 F.2d 797, 803-04, 14 E.R.C. 1356, 1361-62 (7th Cir. 1980).

24. Id. at 1362-63.

25. 572 F.2d 1150 (6th Cir. 1978). The court uses extensive quotations from this case to resolve the modeling issue.

26. 578 F.2d 660 (6th Cir. 1978).

27. 621 F.2d at 805.

28. Id. at 805-06.

29. U.S. Steel v. EPA, 605 F.2d 283 (7th Cir. 1979), cert. denied, 444 U.S. 1035, 100 S. Ct. 710 (1980); Oscar Mayer & Co., Inc. v. Costle, ____ F.2d ____, 13 E.R.C. 1457 (7th Cir. 1979); Indianapolis Power and Light Co. v. Costle, ____ F.2d ____, 13 E.R.C. 1461 (7th Cir. 1979).

30. General Motors Corp. v. Costle, ____ F.2d ____, 15 E.R.C. 1030 (6th Cir. 1980); Cincinatti Gas & Electric Co. v. Costle, ____ F.2d ____, 15 E.R.C. 1033 (6th Cir. 1980).

31. 15 E.R.C. at 1031.

32. Id. at 1032.

33. Id. at 1032-33.

34. ____ F.2d ____, 15 E.R.C. 1033 (6th Cir. 1980).

35. 15 E.R.C. at 1035.

36. Cincinnati Gas & Electric Co. v. EPA, 578 F.2d 660 (6th Cir. 1978), cert, denied, 439 U.S. 1114 (1979).

37. 15 E.R.C. at 1035-36.

38. Id. at 1037 citing Republic Steel Corp. v. EPA, 621 F.2d 797, 805 (6th Cir. 1980). The case upholding MAXT-24 was Cincinnati Gas & Electric Co. v. EPA, 578 F.2d 660 (6th Cir. 1978).

39. 15 E.R.C. at 1037.

40. 15 E.R.C. at 1037-38.

41. 15 E.R.C. at 1038.

42. ____ F.2d ____, 15 E.R.C. 1097 (6th Cir. 1980).

43. See text accompanying notes 24 to 28 supra.

44. 15 E.R.C. at 1099.

45. Id.

46. Id. at 1100.

47. Id. at 1101.

48. Id. at 1101-02.

49. 42 U.S.C. §§ 7501-08 (1978).

50. 42 U.S.C. § 7502(a)(1) (1978).

51. Reasonable further progress is defined to mean:

> . . . annual incremental reductions in emissions of the applicable air pollutants (including substatial reductions in the early years following approval or promulgation of plan provisions. . . .) which are sufficient in the judgment of the Administrator, to provide for attainment of the applicable national ambient air quality standard by the date required. . . .

42 U.S.C. § 7501(1) (1978).

52. 42 U.S.C. § 7502(a)(1) (1978).

53. 42 U.S.C. § 7502(a)(2) (1978).

54. 42 U.S.C. § 7502(b)(11) (1978).

55. In late 1980 two states, California and Colorado, among several others were on the verge of losing their federal highway monies because of a failure of their respective state legislatures to enact a mandatory vehicle inspection/maintenance program. See, e.g., 10 Envir. Rep. (BNA) 2329 (1980); 11 Envir. Rep. (BNA) 60-61, 667-68, 670-71 (1980).

56. 42 U.S.C. § 7503 (1978).

57. 42 U.S.C. § 7502(b)(1) & (9) (1978).

58. 42 U.S.C. § 7503 (1978).

59. 40 C.F.R. §§ 51.24(i)(1), 52(i)(1) (1978).

60. 636 F.2d 323 (1979).

61. Id. at 365 citing H.R. Rep. No. 95-564, 95th Cong., 1st Sess. 151 (1977) and H.R. Rep. No. 95-294, 95th Cong., 1st Sess. 9, 145, 151-52 (1977).

62. Id. at 364-66.